Discussion of: COGNITION AND BEHAVIOR IN TWO-PERSON GUESSING GAMES: AN EXPERIMENTAL STUDY

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Theory

L1 best response to a uniform

L2 best response to L1

etc.

D1 one round of dominance, best response to uniform

D2 two rounds of dominance, best response to uniform

etc.

Equilibrium

sophisticated – best response to true distribution

Game

two players make simultaneous guesses [quoting from paper]

➢ each player has a lower and an upper limit, with guesses autocorrected to lie within the limits (why – you can make good choices without knowing the limits)

➢ each player has a target

➢ payoff higher closer your guess to your target times your partners guess

➢ targets and limits vary independently across players and games

➢ targets sometimes both less than one, sometimes both greater than one, and sometimes mixed

➢ games are asymmetric (with one exception), dominance-solvable in 3-52 rounds,

➢ have essentially unique equilibria determined (but not always directly) by players lower limits when the product of their targets is less than one or by their upper limits when the product is greater than one

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Design

games designed specifically to separate types

payoff information must be "uncovered" revealing valuable information about what the players were thinking (i.e. did they get the right information to determine dominance?)

large strategy space

"32% of the subjects in our Baseline treatment made 9-16 of one types exactly predicted guesses in 16 games"

Details

well, a bit vague "All six treatments used the same 16 games, which include eight player-symmetric pairs so that Baseline subjects can be paired with other Baseline subjects without dividing a session s subjects into subgroups."

each player played 16 times, matched (randomly? round robin?) in large population

NO FEEDBACK: play 16 times, but don't learn results until the end

the games in which he played were chosen randomly, not clear if this randomness was resolved in advance the same way every time, or resolved dynamically

baseline – is as described

open boxes – presumably they get to see the payoffs without clicking

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robot trained – apparently knowingly played against a computer which used the specified strategy their "type" was supposed to optimize against (L1, L2, D1, or equilibrium)

"Equilibrium subjects, for instance, were taught to identify their equilibrium guesses by direct checking for purestrategy equilibrium, best-response dynamics, and iterated dominance."

the point apparently to check how easy it is for players to carry out these strategies

can't say much about the results – the tables are pretty incomprehensible, so I'll specify my wishlist

➢ what fraction are identified to be of each type

➢ do types change over time – i.e. are there players who start out, say as L1 and later become sophisticated?